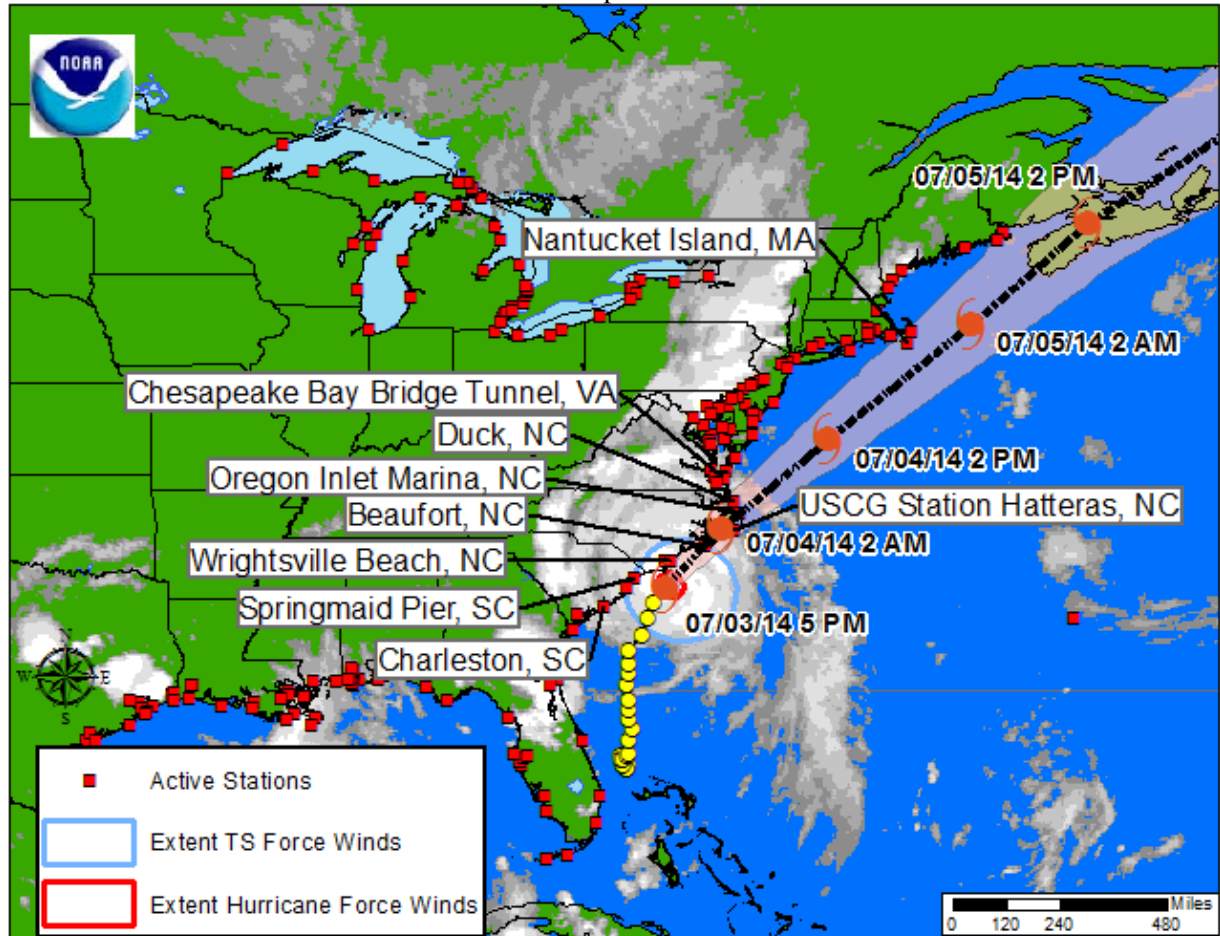




Hurricane ARTHUR QuickLook  
Posted: 18:00 EDT 07/03/2014

#### NOAA and NOAA Partnership Stations Relative to the Storm



#### Storm Analysis

As of 07/03/2014 18:00 EDT, water levels along the Carolinas and Virginia are currently ranging from 0 to 2.3 feet above tidal predictions. Water levels from Virginia to Rhode Island are up to 0.5 ft above predicted levels. Wind speeds increased dramatically in North Carolina, and they are increasing in Virginia. Wind speeds range from 10 to 35 knots with higher gusts. Wind gusts up to 50 knots were recorded in Wrightsville Beach, NC. Barometric pressure is rapidly falling in North Carolina. It is slowly falling across the region.

Water Level and Meteorological plots available below are updated automatically. A line denoting Mean Higher High Water (MHHW) is displayed to provide an approximate indication of when flooding inundation may occur.

For additional data, please see the [Center for Operational Oceanographic Products & Services](#) website. For more information or archived products and reports, please see the [Storm QuickLook](#) Homepage.

Analyst: KG

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SELECT NATIONAL HURRICANE CENTER ADVISORY INFORMATION:

HURRICANE ARTHUR ADVISORY NUMBER 12  
500 PM EDT THU JUL 03 2014

...EYE OF ARTHUR NEARING THE COAST OF NORTH CAROLINA...

WATCHES AND WARNINGS

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CHANGES WITH THIS ADVISORY...

A TROPICAL STORM WARNING HAS BEEN ISSUED FOR NANTUCKET ISLAND AND FOR CAPE COD FROM PROVINCETOWN TO CHATHAM.

ENVIRONMENT CANADA HAS ISSUED A TROPICAL STORM WATCH FOR NOVA SCOTIA FROM PORT MAITLAND EASTWARD AND NORTHWARD TO POINT ACONI.

SUMMARY OF WATCHES AND WARNINGS IN EFFECT...

A HURRICANE WARNING IS IN EFFECT FOR...

- \* SURF CITY NORTH CAROLINA TO THE NORTH CAROLINA/VIRGINIA BORDER
- \* PAMLICO SOUND
- \* EASTERN ALBEMARLE SOUND

A HURRICANE WATCH IS IN EFFECT FOR...

- \* LITTLE RIVER INLET TO SOUTH OF SURF CITY

A TROPICAL STORM WARNING IS IN EFFECT FOR...

- \* SOUTH SANTEE RIVER SOUTH CAROLINA TO SOUTH OF SURF CITY
- \* THE NORTH CAROLINA/VIRGINIA BORDER TO CAPE CHARLES LIGHT VIRGINIA...INCLUDING THE MOUTH OF THE CHESAPEAKE BAY
- \* WESTERN ALBEMARLE SOUND
- \* NANTUCKET
- \* CAPE COD FROM PROVINCETOWN TO CHATHAM

A TROPICAL STORM WATCH IS IN EFFECT FOR...

- \* NOVA SCOTIA FROM PORT MAITLAND TO POINT ACONI

A HURRICANE WARNING MEANS THAT HURRICANE CONDITIONS ARE EXPECTED SOMEWHERE WITHIN THE WARNING AREA. PREPARATIONS TO PROTECT LIFE AND PROPERTY SHOULD HAVE ALREADY BEEN COMPLETED.

A HURRICANE WATCH MEANS THAT HURRICANE CONDITIONS ARE POSSIBLE WITHIN THE WATCH AREA. ANY UNEXPECTED DEVIATION OF THE TRACK TO THE LEFT...OR AN EXPANSION OF HURRICANE-FORCE WINDS INTO THE NORTHWEST QUADRANT OF THE STORM...WOULD BRING HURRICANE-FORCE WINDS TO THE COAST IN THE WATCH AREA.

A TROPICAL STORM WARNING MEANS THAT TROPICAL STORM CONDITIONS ARE EXPECTED SOMEWHERE WITHIN THE WARNING AREA.

INTERESTS ELSEWHERE IN COASTAL PORTIONS OF NEW ENGLAND...NOVA SCOTIA...AND NEWFOUNDLAND SHOULD MONITOR THE PROGRESS OF ARTHUR.

FOR STORM INFORMATION SPECIFIC TO YOUR AREA IN THE UNITED STATES...INCLUDING POSSIBLE INLAND WATCHES AND WARNINGS...PLEASE MONITOR PRODUCTS ISSUED BY YOUR LOCAL NATIONAL WEATHER SERVICE FORECAST OFFICE. FOR STORM INFORMATION SPECIFIC TO YOUR AREA OUTSIDE THE UNITED STATES...PLEASE MONITOR PRODUCTS ISSUED BY YOUR NATIONAL METEOROLOGICAL SERVICE.

#### DISCUSSION AND 48-HOUR OUTLOOK

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AT 500 PM EDT...THE CENTER OF HURRICANE ARTHUR WAS LOCATED NEAR LATITUDE 33.4 NORTH...LONGITUDE 77.9 WEST. ARTHUR IS MOVING TOWARD THE NORTH-NORTHEAST NEAR 13 MPH... A TURN TOWARD THE NORTHEAST WITH AN INCREASE IN FORWARD SPEED IS EXPECTED TONIGHT...FOLLOWED BY A FURTHER INCREASE IN FORWARD SPEED ON FRIDAY. ON THE FORECAST TRACK...THE CORE OF ARTHUR IS EXPECTED TO PASS NEAR OR OVER THE COAST OF NORTH CAROLINA AND THE OUTER BANKS TONIGHT. THE CENTER OF ARTHUR IS FORECAST TO PASS EAST OF THE MID-ALANTIC COAST FRIDAY AND APPROACH NOVA SCOTIA FRIDAY NIGHT.

DATA FROM AN AIR FORCE RESERVE HURRICANE HUNTER AIRCRAFT INDICATE THAT MAXIMUM SUSTAINED WINDS ARE NEAR 90 MPH...WITH HIGHER GUSTS. SOME STRENGTHENING IS FORECAST DURING THE NEXT 24 HOURS...AND ARTHUR IS EXPECTED TO BE A CATEGORY TWO HURRICANE WHEN IT PASSES OVER OR NEAR THE NORTH CAROLINA COAST. ARTHUR IS EXPECTED TO BEGIN WEAKEN FRIDAY NIGHT AND IS FORECAST TO BECOME A POST-TROPICAL CYLONE SATURDAY.

HURRICANE FORCE WINDS EXTEND OUTWARD UP TO 35 MILES...FROM THE CENTER...AND TROPICAL STORM FORCE WINDS EXTEND OUTWARD UP TO 150 MILES.

THE LATEST MINIMUM CENTRAL PRESSURE MEASURED BY AN AIR FORCE RESERVE RECONNAISSANCE AIRCRAFT WAS 977 MB.

#### HAZARDS AFFECTING LAND

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WIND...TROPICAL STORM CONDITIONS ARE EXPECTED TO REACH PORTIONS OF THE WARNING AREA WITHIN THE NEXT FEW HOURS AND SPREAD NORTHWARD THROUGH THE TROPICAL STORM AND HURRICANE WARNING AREAS THIS EVENING AND TONIGHT. HURRICANE CONDITIONS ARE EXPECTED WITHIN PORTIONS OF THE HURRICANE WARNING AREA BY TONIGHT. HURRICANE-FORCE WINDS ARE POSSIBLE IN THE HURRICANE WATCH AREA BEGINNING THIS EVENING. ANY UNEXPECTED DEVIATION OF THE TRACK TO THE LEFT...OR AN

EXPANSION OF HURRICANE-FORCE WINDS INTO THE NORTHWEST QUADRANT OF THE STORM...WOULD BRING HURRICANE-FORCE WINDS TO THE COAST IN THE HURRICANE WATCH AREA.

STORM SURGE...THE COMBINATION OF A DANGEROUS STORM SURGE AND THE TIDE WILL CAUSE NORMALLY DRY AREAS NEAR THE COAST TO BE FLOODED BY RISING WATERS. THE WATER COULD REACH THE FOLLOWING HEIGHTS ABOVE GROUND IF THE PEAK SURGE OCCURS AT THE TIME OF HIGH TIDE...

NORTH CAROLINA WITHIN THE HURRICANE WARNING AREA...3 TO 5 FT  
PAMLICO AND ALBEMARLE SOUNDS...2 TO 4 FT  
SOUTHERN NORTH CAROLINA AND NORTHEASTERN SOUTH CAROLINA...1 TO 3 FT  
EXTREME SOUTHEASTERN VIRGINIA...1 TO 3 FT

THE HIGHEST WATER WILL OCCUR ALONG THE IMMEDIATE COAST IN AREAS OF ONSHORE FLOW. THE SURGE WILL BE ACCOMPANIED BY LARGE AND DAMAGING WAVES. SURGE-RELATED FLOODING DEPENDS ON THE RELATIVE TIMING OF THE SURGE AND THE TIDAL CYCLE...AND CAN VARY GREATLY OVER SHORT DISTANCES. FOR INFORMATION SPECIFIC TO YOUR AREA...PLEASE SEE PRODUCTS ISSUED BY YOUR LOCAL NATIONAL WEATHER SERVICE OFFICE AND THE NEW EXPERIMENTAL POTENTIAL STORM SURGE FLOODING MAP FOR MORE DETAILS.

RAINFALL...RAINFALL ACCUMULATIONS OF 4 TO 6 INCHES...WITH ISOLATED MAXIMUM AMOUNTS OF 8 INCHES...ARE EXPECTED OVER COASTAL AREAS OF NORTH CAROLINA THROUGH FRIDAY. RAINFALL ACCUMULATIONS OF 1 TO 2 INCHES ARE POSSIBLE ALONG THE UPPER COAST OF SOUTH CAROLINA. RAINFALL ACCUMULATIONS OF 2 TO 4 INCHES ARE EXPECTED OVER PORTIONS OF EASTERN MASSACHUSETTS AND RHODE ISLAND.

TORNADOES...ISOLATED TORNADOES ARE POSSIBLE OVER PORTIONS OF COASTAL NORTH CAROLINA THROUGH FRIDAY MORNING.

SURF...SWELLS GENERATED BY ARTHUR ARE AFFECTING AREAS FROM THE COAST OF GEORGIA NORTHWARD TO NORTH CAROLINA. THESE SWELLS ARE EXPECTED TO CAUSE LIFE-THREATENING SURF AND RIP CURRENTS. FOR MORE INFORMATION...PLEASE MONITOR PRODUCTS ISSUED BY YOUR LOCAL NATIONAL WEATHER SERVICE FORECAST OFFICE.

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FORECASTER BROWN

For the purpose of timely release, data contained within this QuickLook have undergone a "limited" NOS Quality Assurance/Control; however, the data have not yet undergone final verification. All data subject to NOS verification.

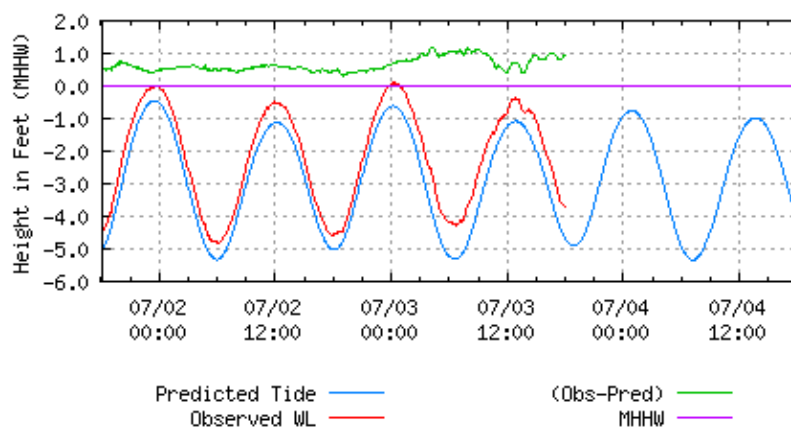
Jump to: [Charleston - Water Level](#), [Charleston - Winds](#), [Charleston - Barometric](#), [Springmaid Pier - Water Level](#), [Springmaid Pier - Winds](#), [Springmaid Pier - Barometric](#), [Wrightsville Beach - Water Level](#), [Wrightsville Beach - Winds](#), [Wrightsville Beach - Barometric](#), [Beaufort - Water Level](#), [Beaufort - Winds](#), [Beaufort - Barometric](#), [USCG Station Hatteras - Water Level](#), [USCG Station Hatteras - Winds](#), [USCG Station](#)

Hatteras - Barometric, Oregon Inlet Marina - Water Level, Oregon Inlet Marina - Winds, Oregon Inlet Marina - Barometric, Duck - Water Level, Duck - Winds, Duck - Barometric, Chesapeake Bay Bridge Tunnel - Water Level, Chesapeake Bay Bridge Tunnel - Winds, Chesapeake Bay Bridge Tunnel - Barometric, Nantucket Island - Water Level, Nantucket Island - Winds, Nantucket Island - Barometric, Nantucket Island - Air/Water Temp

Hurricane ARTHUR QuickLook, POSTED 18:00 EDT 07/03/2014

NOAA/NOS/CO-OPS 8665530 Charleston, SC

Preliminary Water Level, relative to Mean Higher High Water (MHHW)



Last Observed Sample: 07/03/2014 18:00 (EDT). Data relative to MHHW

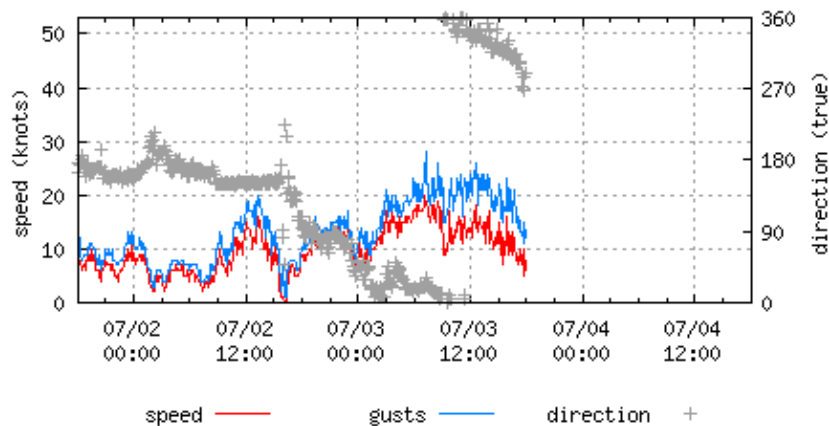
Observed: -3.75 ft. Predicted: -4.69 ft. Residual: 0.94 ft.

Historical Maximum Water Level: Sep 21 1989, 6.76 ft.

Next High Tide: 07/04/2014 00:49 (EDT), -0.76 ft.

NOAA/NOS/CO-OPS 8665530 Charleston, SC

Wind Speed / Gusts / Direction

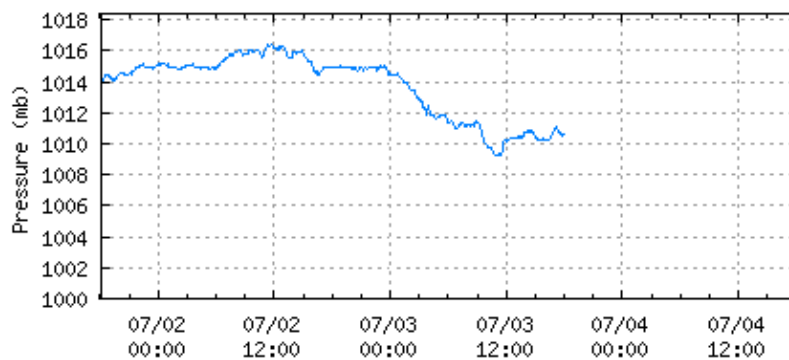


Last Observed Sample: 07/03/2014 18:00 (EDT)

Wind Speed: 7 knots Gusts: 14 knots Direction: 295° T

NOAA/NOS/CO-OPS 8665530 Charleston, SC

Barometric Pressure



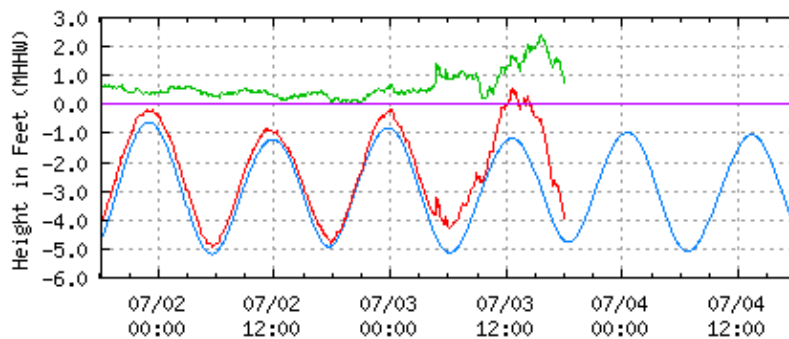
barometric pressure —

Last Observed Sample: 07/03/2014 18:00 (EDT)

Barometric Pressure: 1010.9 mb

NOAA/NOS/CO-OPS 8661070 Springmaid Pier, SC

Preliminary Water Level, relative to Mean Higher High Water (MHHW)



Predicted Tide —

Observed WL —

(Obs-Pred) —

MHHW —

Last Observed Sample: 07/03/2014 18:00 (EDT). Data relative to MHHW

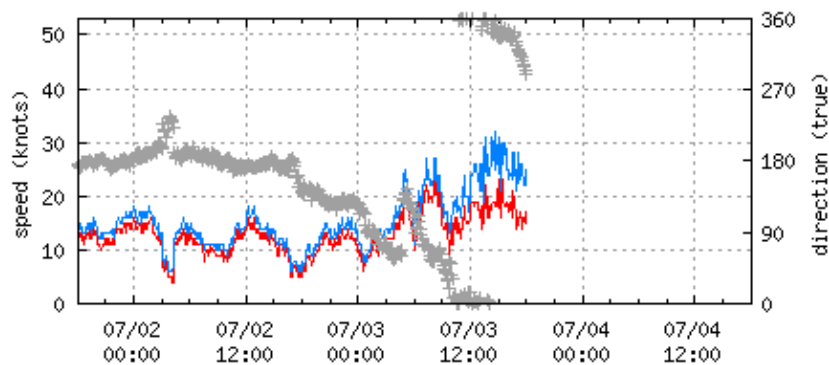
Observed: -3.98 ft. Predicted: -4.72 ft. Residual: 0.74 ft.

Historical Maximum Water Level: Jan 1 1987, 3.65 ft.

Next High Tide: 07/04/2014 00:30 (EDT), -0.97 ft.

NOAA/NOS/CO-OPS 8661070 Springmaid Pier, SC

Wind Speed / Gusts / Direction



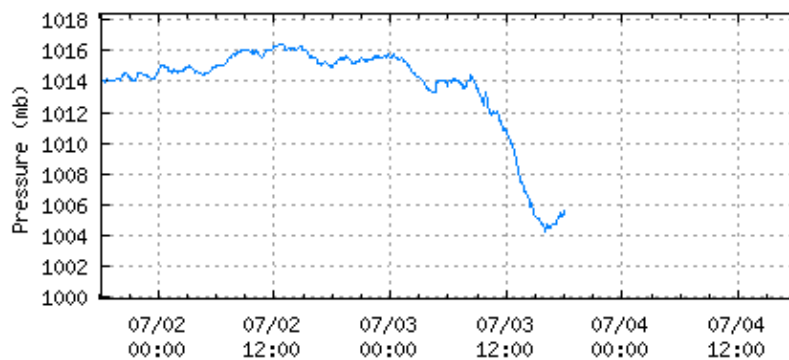
speed — gusts — direction +

Last Observed Sample: 07/03/2014 18:00 (EDT)

Wind Speed: 17 knots Gusts: 25 knots Direction: 291° T

NOAA/NOS/CO-OPS 8661070 Springmaid Pier, SC

Barometric Pressure



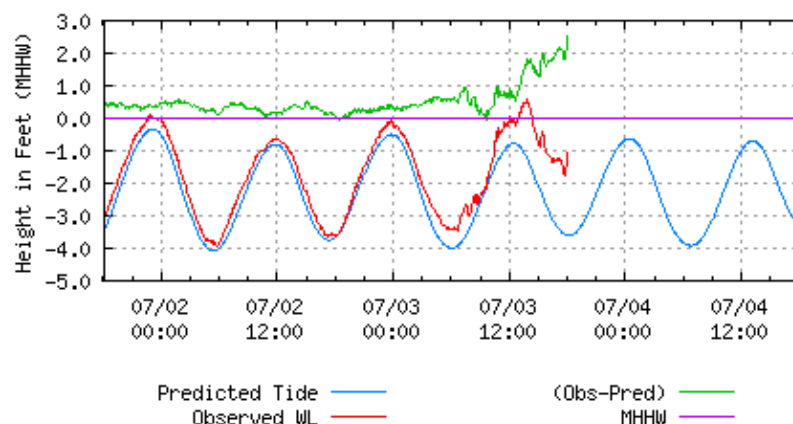
barometric pressure —

Last Observed Sample: 07/03/2014 18:00 (EDT)

Barometric Pressure: 1005.6 mb



NOAA/NOS/CO-OPS 8658163 Wrightsville Beach, NC  
Preliminary Water Level, relative to Mean Higher High Water(MHHW)



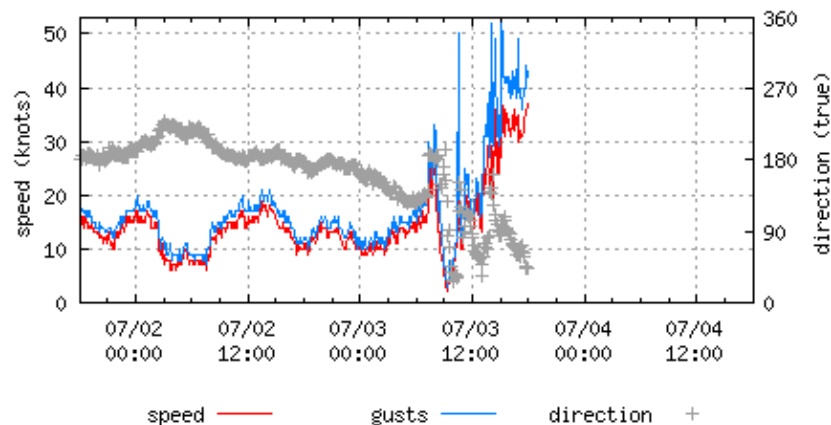
Last Observed Sample: 07/03/2014 18:00 (EDT). Data relative to MHHW

Observed: -1.04 ft. Predicted: -3.59 ft. Residual: 2.55 ft.

Historical Maximum Water Level: Sep 25 2008, 2.81 ft.

Next High Tide: 07/04/2014 00:25 (EDT), -0.64 ft.

NOAA/NOS/CO-OPS 8658163 Wrightsville Beach, NC  
Wind Speed / Gusts / Direction

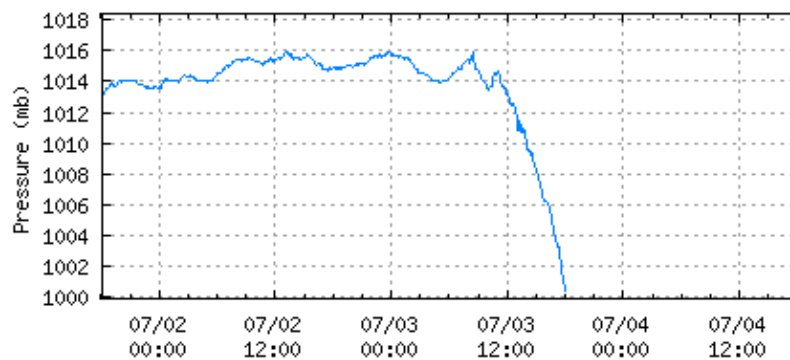


Last Observed Sample: 07/03/2014 18:00 (EDT)

Wind Speed: 37 knots Gusts: 43 knots Direction: 43° T

NOAA/NOS/CO-OPS 8658163 Wrightsville Beach, NC

Barometric Pressure



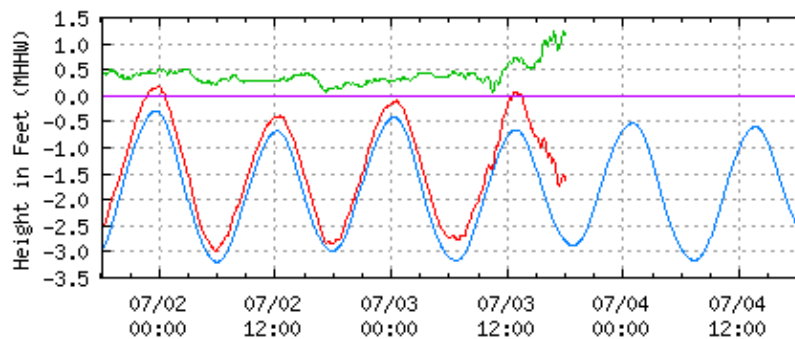
barometric pressure —

Last Observed Sample: 07/03/2014 18:00 (EDT)

Barometric Pressure: 1000.4 mb

NOAA/NOS/CO-OPS 8656483 Beaufort, NC

Preliminary Water Level, relative to Mean Higher High Water (MHHW)



Predicted Tide —

Observed WL —

(Obs-Pred) —

MHHW —

Last Observed Sample: 07/03/2014 18:00 (EDT). Data relative to MHHW

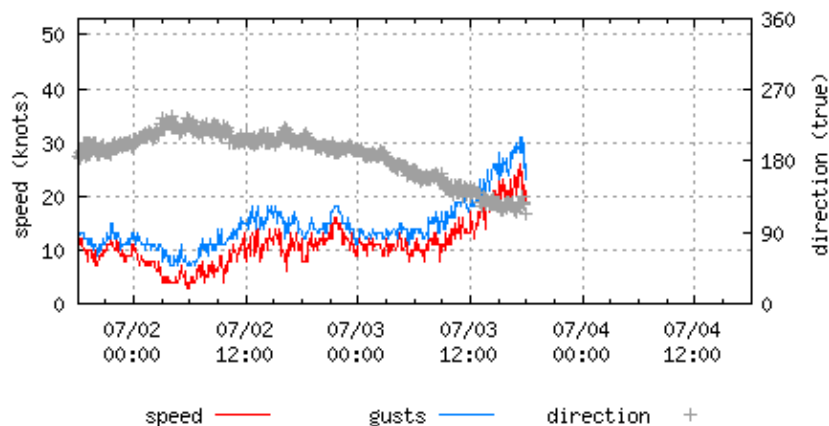
Observed: -1.64 ft. Predicted: -2.80 ft. Residual: 1.16 ft.

Historical Maximum Water Level: Sep 14 2005, 3.01 ft.

Next High Tide: 07/04/2014 00:55 (EDT), -0.53 ft.

NOAA/NOS/CO-OPS 8656483 Beaufort, NC

Wind Speed / Gusts / Direction

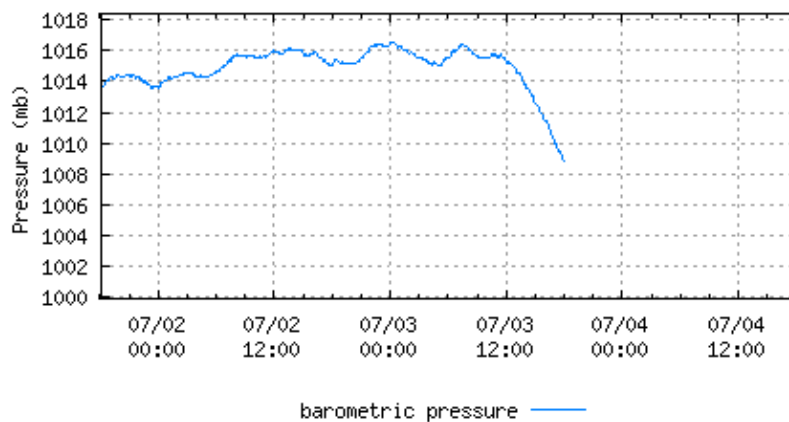


Last Observed Sample: 07/03/2014 18:00 (EDT)

Wind Speed: 21 knots Gusts: 26 knots Direction: 114° T

NOAA/NOS/CO-OPS 8656483 Beaufort, NC

Barometric Pressure

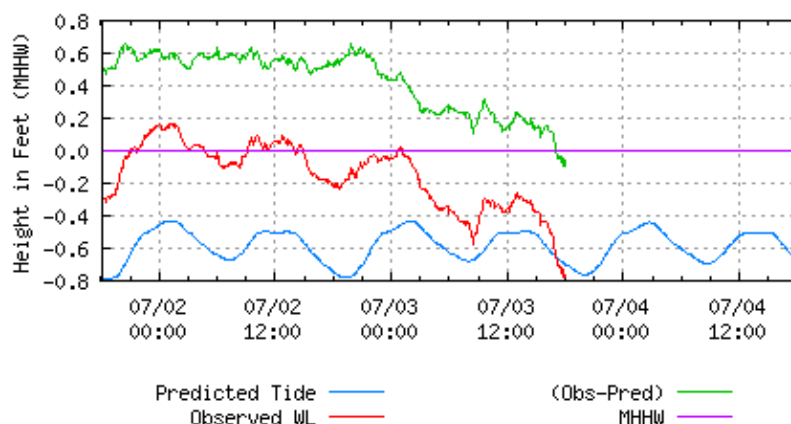


Last Observed Sample: 07/03/2014 18:00 (EDT)

Barometric Pressure: 1008.8 mb

NOAA/NOS/CO-OPS 8654467 USCG Station Hatteras, NC

Preliminary Water Level, relative to Mean Higher High Water(MHHW)



Last Observed Sample: 07/03/2014 18:00 (EDT). Data relative to MHHW

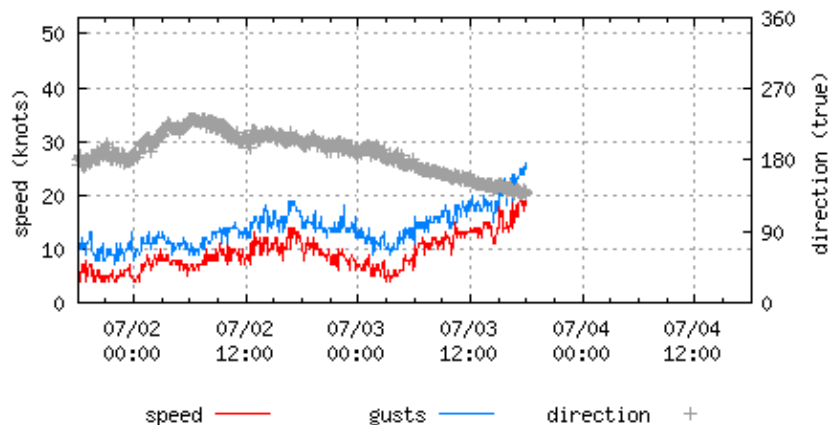
Observed: -0.76 ft. Predicted: -0.70 ft. Residual: -0.06 ft.

Historical Maximum Water Level: Oct 29 2012, 4.15 ft.

Next High Tide: 07/04/2014 02:39 (EDT), -0.45 ft.

NOAA/NOS/CO-OPS 8654467 USCG Station Hatteras, NC

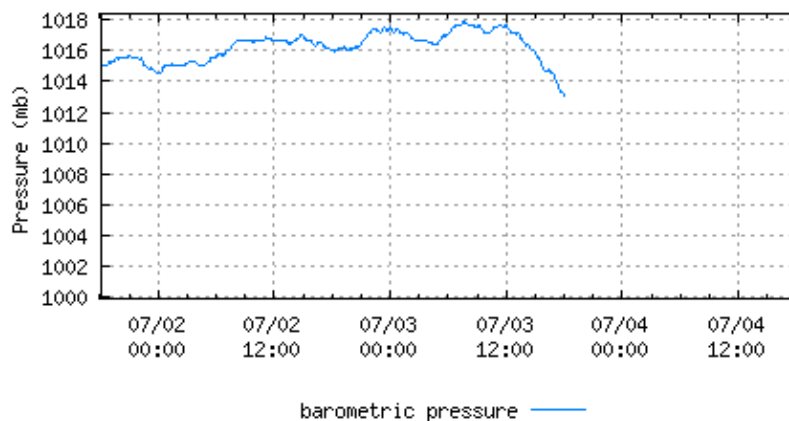
Wind Speed / Gusts / Direction



Last Observed Sample: 07/03/2014 18:00 (EDT)

Wind Speed: 20 knots Gusts: 25 knots Direction: 138° T

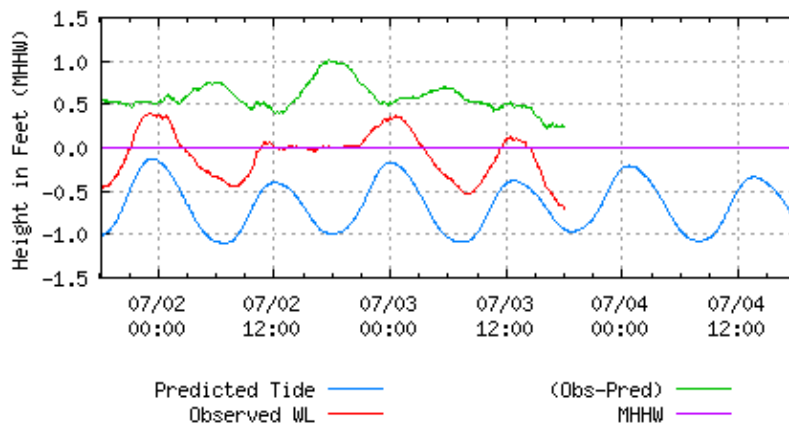
NOAA/NOS/CO-OPS 8654467 USCG Station Hatteras, NC  
Barometric Pressure



Last Observed Sample: 07/03/2014 18:00 (EDT)

Barometric Pressure: 1013.1 mb

NOAA/NOS/CO-OPS 8652587 Oregon Inlet Marina, NC  
Preliminary Water Level, relative to Mean Higher High Water (MHHW)



Last Observed Sample: 07/03/2014 18:00 (EDT). Data relative to MHHW

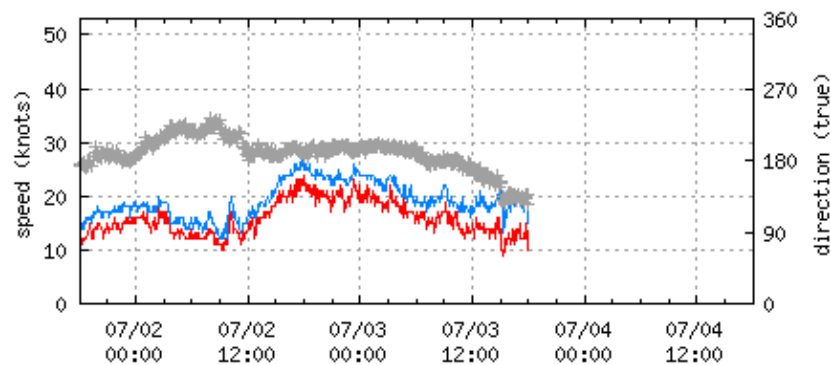
Observed: -0.70 ft. Predicted: -0.94 ft. Residual: 0.24 ft.

Historical Maximum Water Level: Aug 28 2011, 6.32 ft.

Next High Tide: 07/04/2014 00:41 (EDT), -0.21 ft.

NOAA/NOS/CO-OPS 8652587 Oregon Inlet Marina, NC

Wind Speed / Gusts / Direction



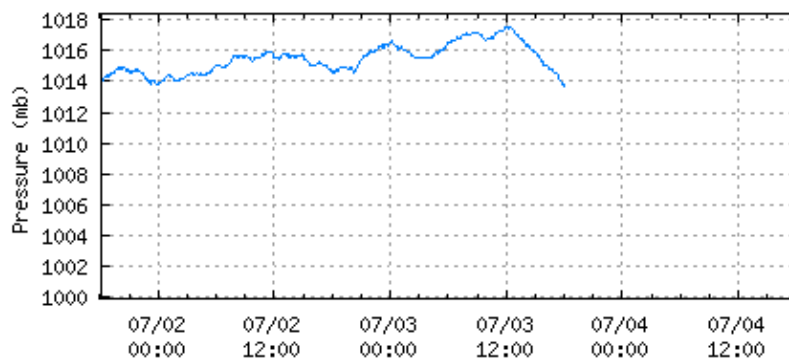
speed — gusts — direction +

Last Observed Sample: 07/03/2014 18:00 (EDT)

Wind Speed: 10 knots Gusts: 15 knots Direction: 125° T

NOAA/NOS/CO-OPS 8652587 Oregon Inlet Marina, NC

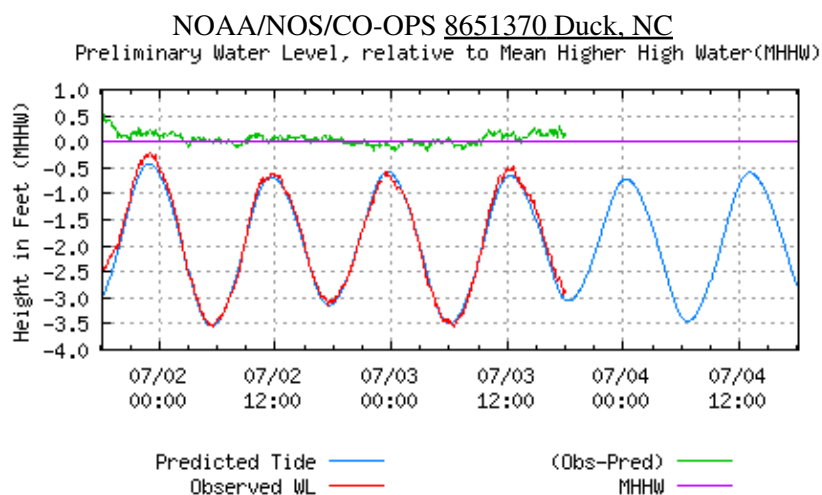
Barometric Pressure



barometric pressure —

Last Observed Sample: 07/03/2014 18:00 (EDT)

Barometric Pressure: 1013.7 mb

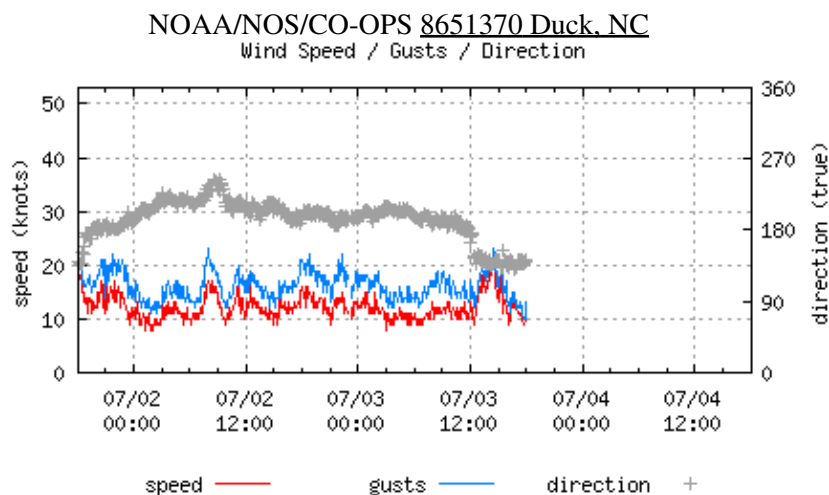


Last Observed Sample: 07/03/2014 18:00 (EDT). Data relative to MHHW

Observed: -2.88 ft. Predicted: -3.04 ft. Residual: 0.16 ft.

Historical Maximum Water Level: Sep 18 2003, 4.13 ft.

Next High Tide: 07/04/2014 00:19 (EDT), -0.72 ft.

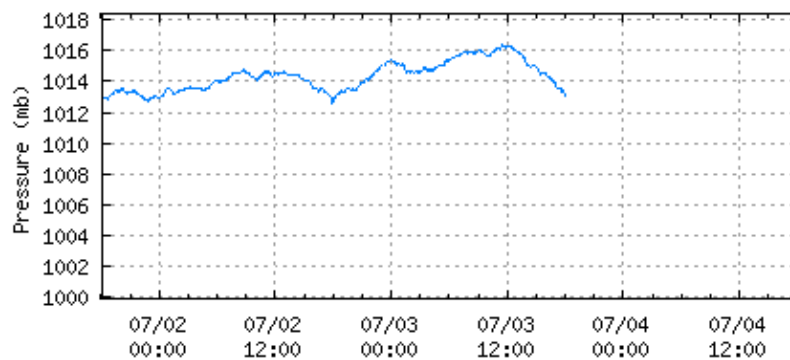


Last Observed Sample: 07/03/2014 18:00 (EDT)

Wind Speed: 10 knots Gusts: 13 knots Direction: 139° T

NOAA/NOS/CO-OPS 8651370 Duck, NC

Barometric Pressure



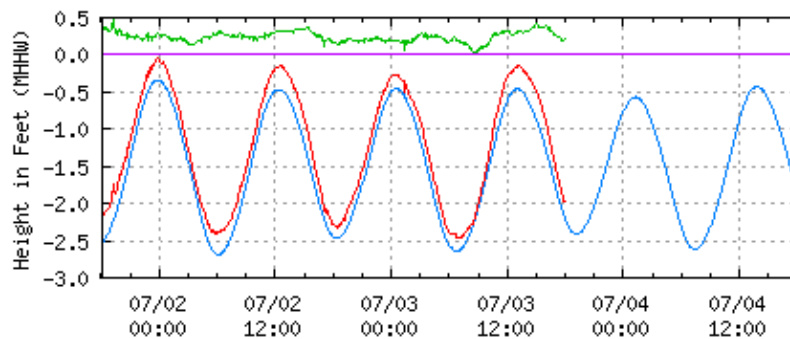
barometric pressure —

Last Observed Sample: 07/03/2014 18:00 (EDT)

Barometric Pressure: 1013.1 mb

NOAA/NOS/CO-OPS 8638863 Chesapeake Bay Bridge Tunnel, VA

Preliminary Water Level, relative to Mean Higher High Water (MHHW)



Predicted Tide —

Observed WL —

(Obs-Pred) —

MHHW —

Last Observed Sample: 07/03/2014 17:54 (EDT). Data relative to MHHW

Observed: -1.97 ft. Predicted: -2.19 ft. Residual: 0.22 ft.

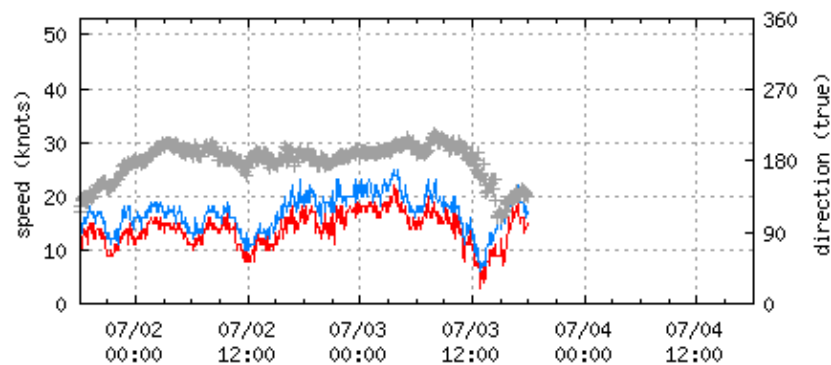
Historical Maximum Water Level: Nov 12 2009, 4.66 ft.

Next High Tide: 07/04/2014 01:11 (EDT), -0.57 ft.



NOAA/NOS/CO-OPS 8638863 Chesapeake Bay Bridge Tunnel, VA

Wind Speed / Gusts / Direction



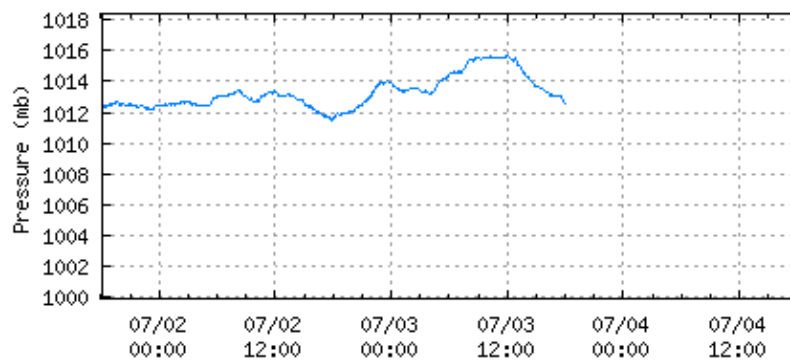
speed — gusts — direction +

Last Observed Sample: 07/03/2014 17:54 (EDT)

Wind Speed: 15 knots Gusts: 17 knots Direction: 136° T

NOAA/NOS/CO-OPS 8638863 Chesapeake Bay Bridge Tunnel, VA

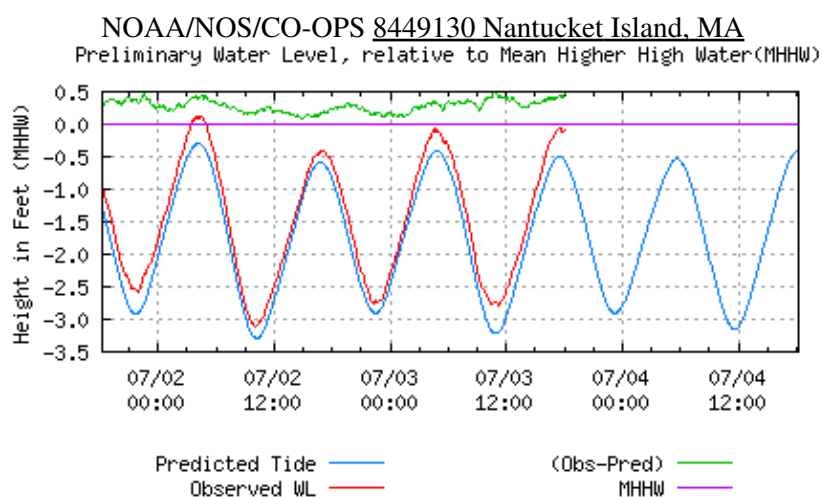
Barometric Pressure



barometric pressure —

Last Observed Sample: 07/03/2014 17:54 (EDT)

Barometric Pressure: 1012.6 mb

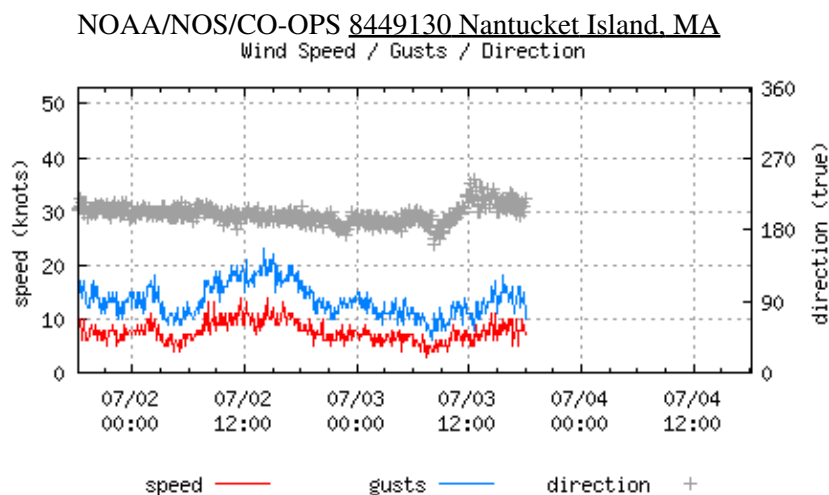


Last Observed Sample: 07/03/2014 18:00 (EDT). Data relative to MHHW

Observed: -0.09 ft. Predicted: -0.55 ft. Residual: 0.46 ft.

Historical Maximum Water Level: Oct 30 1991, 4.29 ft.

Next High Tide: 07/04/2014 05:38 (EDT), -0.54 ft.

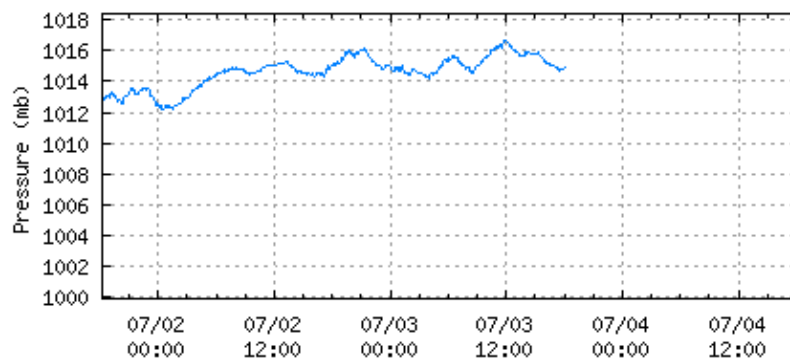


Last Observed Sample: 07/03/2014 18:00 (EDT)

Wind Speed: 7 knots Gusts: 10 knots Direction: 221° T

NOAA/NOS/CO-OPS 8449130 Nantucket Island, MA

Barometric Pressure



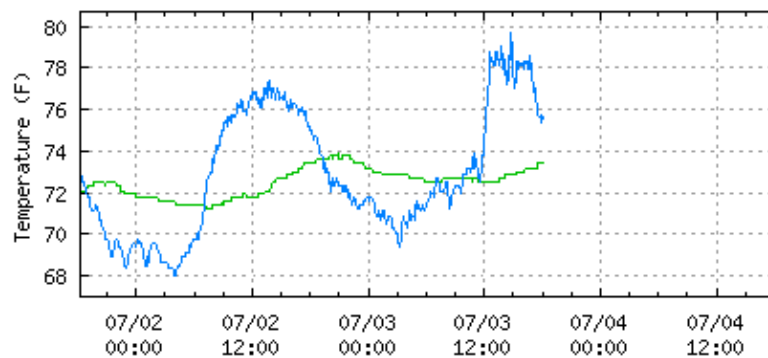
barometric pressure —

Last Observed Sample: 07/03/2014 18:00 (EDT)

Barometric Pressure: 1014.9 mb

NOAA/NOS/CO-OPS 8449130 Nantucket Island, MA

Air / Water Temperature



water temp. —

air temp —

Last Observed Sample: 07/03/2014 18:00 (EDT)

Water Temperature: 73.4° F Air Temperature: 75.6° F

## Hurricane ARTHUR QuickLook, POSTED 18:00 EDT 07/03/2014

Latest Water Level Observations on MHHW

Station ID	Station Name	Date/Time	Observed Water Level	Predicted Tide	Residual Water Level	24 Hour Maximum Storm Tide
8665530	Charleston, SC	07/03/2014 18:00 (EDT)	-3.75 ft	-4.69 ft	0.94 ft	0.11 ft
8661070	Springmaid Pier, SC	07/03/2014 18:00 (EDT)	-3.98 ft	-4.72 ft	0.74 ft	0.53 ft
8658163	Wrightsville Beach, NC	07/03/2014 18:00 (EDT)	-1.04 ft	-3.59 ft	2.55 ft	0.59 ft
8656483	Beaufort, NC	07/03/2014 18:00 (EDT)	-1.64 ft	-2.80 ft	1.16 ft	0.07 ft
8654467	USCG Station Hatteras, NC	07/03/2014 18:00 (EDT)	-0.76 ft	-0.70 ft	-0.06 ft	0.02 ft
8652587	Oregon Inlet Marina, NC	07/03/2014 18:00 (EDT)	-0.70 ft	-0.94 ft	0.24 ft	0.37 ft
8651370	Duck, NC	07/03/2014 18:00 (EDT)	-2.88 ft	-3.04 ft	0.16 ft	-0.47 ft
8638863	Chesapeake Bay Bridge Tunnel, VA	07/03/2014 17:54 (EDT)	-1.97 ft	-2.19 ft	0.22 ft	-0.15 ft
8449130	Nantucket Island, MA	07/03/2014 18:00 (EDT)	-0.09 ft	-0.55 ft	0.46 ft	-0.06 ft

Center for Operational Oceanographic Products & Services (CO-OPS) | National Ocean Service (NOS)  
National Oceanic and Atmospheric Administration | U.S. Department of Commerce